PRE-AF

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: Gunther SCHILLER - 1 (RCE)

SERIAL NO.: 10/813,605 EXAMINER: M. DANIELS

FILED: MARCH 30, 2004 GROUP: 1732

TITLE: DEVICE AND METHOD FOR THE PRODUCTION OF A MULTI-LAYER CONCRETE PIPE

COVER LETTER ENCLOSING BRIEF ON APPEAL AND FEE

MAIL STOP APPEAL BRIEF
Assistant Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Enclosed herewith for filing is a Brief on Appeal and fee. The Commissioner of Patents is hereby authorized to charge any underpayment or credit any overpayment to Deposit Account No. 03-2468.

Respectfully submitted,
Gunther SCHILLER

COLLARD & ROE,
1077 Northern Boulevard
Roslyn, New York 11576
(516) 365-9802

Frederick J. Dorchak, Reg. No. 29,298
Elizabeth Collard Richter, Reg.No.35,103
Attorneys for Applicants

ECR:DG
Enclosure: Brief on Appeal and Check for $255.00

I hereby certify that this documentation is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: MAIL STOP: Appeal Brief COMMISSIONER FOR PATENTS, P.O. Box 1450, Alexandria, VA on January 16, 2008.

Amy Klein

Amy Klein

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Dear Sir:

In accordance with the provisions of 37 C.F.R. 41.37(c), the following items under appropriate headings are provided to appeal the rejection of claim 15 dated August 24,2007.

REAL PARTY IN INTEREST

The real party in interest is the assignee, SCHLOSSER-PFEIFFER GMBH.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant, the Appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

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SUMMARY OF THE INVENTION

The present invention is described below with reference numbers from the drawings and page and line numbers from the specification. Such reference numbers and citations to the specification are for illustration only and are not intended to limit the claims.

Claim 15 refers to a method for the production of a multi-layer concrete pipe. The method includes pivoting a mold mantle, which stands essentially vertically on a turntable, into a first stand (p. 9 ln. 13-17, p. 23 ln. 3-10, Fig. 11); filling the mold mantle with a first concrete mixture by means of a first charging system (p. 9 ln. 17-18, p. 19 ln. 4-6, Fig. 6); distributing and compacting the concrete mixture in the mold mantle by means of a rotating and vertically displaceable first compacting tool (p. 9 ln. 18-20, p. 19 ln. 6-9, Fig. 6); and pivoting the mold mantle,

which stands essentially vertically on the turntable, out of the first stand and removing a concrete pipe formed from the concrete mixture from the mold (p. 4 ln. 1-5, 11-14, p. 9 ln. 15-17). Before the concrete pipe is removed from the mold, a second concrete mixture, which is an acid-resistant concrete mixture, is filled into the mold mantle, which essentially stands vertically, by means of a second charging system (p. 9 ln. 21 - p. 10 ln. 1). Also, the second concrete mixture is distributed and compacted using a second compacting tool which is different from the first compacting tool and which has a diameter that is smaller a diameter of the first compacting tool (p. 10 ln. 1-4, Fig. 11). Before the second concrete mixture is filled into the mold mantle and distributed and compacted in the mold mantle, the first compacting tool is exchanged for the second compacting tool, by way of a quick-change device in the first stand (p. 10 ln. 16-19). After the second concrete mixture has been filled into the mold mantle and distributed and compacted, the second compacting tool is exchanged for the first compacting tool by way of a quick-change device from the first stand (p. 10 ln. 19 - p. 11 ln. 1).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The Examiner has rejected claim 15 under 35 USC §103 as being unpatentable over *Mitchell* (USPN 4957424) in view of *Hume* (USPN 1768451) and *Lewis* (USPN 2305017).

The Examiner asserts that *Mitchell* teaches a method for the production of a multi-layer concrete pipe, comprising the steps of the present invention, except for limitations drawn to the second concrete mixture and the changing of tools. The Examiner further asserts that *Lewis* and *Hume* teach these limitations and that it would have been obvious to one of ordinary skill in the art at the time of the present invention to combine *Mitchell* with *Lewis* and *Hume*.

ARGUMENT

Claim 15 is patentable over *Mitchell* (USPN 4957424) in view of *Hume* (USPN 1768451) and *Lewis* (USPN 2305017).

The Examiner states that *Mitchell* teaches the production of the concrete pipe comprising the steps of pivoting a mold mantle, which stands essentially vertically on a turntable into a first stand and distributing and compacting the concrete mixture in the mold mantle by a rotating and vertically displaceable first compacting tool. However, the Examiner is not correct in

asserting that *Mitchell* teaches a method for the production of multi layer concrete pipe. As can be seen from the drawings and the description, *Mitchell* describes a method for producing a single layer concrete pipe.

Taking this into account, one of ordinary skill could not use the teachings of *Mitchell* to produce a multi layer concrete pipe. If one skilled in the art would have combined *Mitchell* and *Lewis* (with Lewis teaching the production of a multi layer pipe), it would have been prima facie obvious to produce a multi layer pipe by the centrifugal method as mentioned in Lewis. There is no indication of producing a multi layer pipe standing essentially vertically on a turntable and using a compacting tool which is rotating and vertically displaceable.

In other words, combining *Lewis* and *Mitchell* would lead to the production of a multi layer pipe as described in *Lewis*. Neither *Mitchell* nor *Lewis* teaches one of skill in the art to use a second charging system or a second compacting tool. *Mitchell* teaches to pivot a mold mantel by way of a turntable and the manufacturing of the first concrete layer. The Examiner is not correct in asserting that a production of the second concrete layer will imply a second charging system which is located in the same stand as the first charging system. However, it would be

obvious to provide a second charging system in a second stand having a second compacting tool. Also, *Lewis* teaches the production of a second concrete layer but is silent about any charging systems. Additionally, *Lewis* teaches a method for the production of concrete pipes by the centrifugal method. i.e. by rotating the pipes around a horizontal axis (see column 2, lines 53 to 55 and column 4, line 38).

The same is true taking further into account the teaching of *Hume*. *Hume* neither teaches the production of a multi layer concrete pipe nor the use of a second charging system and a second compacting tool. *Hume* does not even teach the use of a turntable as mentioned in *Mitchell*. Thus, *Hume* seems to be of minor relevance with respect to present claim 15.

In addition, *Hume* does not provide any hint to subsequently produce a first and a second concrete layer in the same stand with different compacting tools and different charging systems belonging to the same stand. Moreover page 3 lines 23 to 29 of *Hume* teaches that a lining may be performed in a similar manner substituting the mold by the pipe to be lined. Thus, one first has to remove the pipe from the mold and only after that one may provide a lining. However, the lining (second concrete mixture) is provided according to the present invention prior to removing

the pipe from the mold. Hence, *Hume* does not present any hint to produce the first and the second concrete layers within successive steps in the same stand.

In the last paragraph of page 5 of the Final Office Action, the Examiner states that the core as shown in *Hume* being detachably connected by a screw to the rod should be interpreted as a quick-change device. On page 2, line 50 *Hume* teaches that the distributing core may be screwed to the upper end of a rod. Attachment and detachment of a distributing core to a rod by means of a screwed connection would take a considerably long time for exchanging the tool for another tool. In addition, according to Figs. 2, 3 and 4 of *Hume*, a thread with a considerable length is provided which is certainly not a quick-change device.

When considering the present invention, one has to bear in mind that it is essential to produce as many pipes per day as possible. Thus, one skilled in the art would try to avoid any extra split second for exchanging a tool, as the number of pipes produced per day would significantly decrease if the exchanging of tools would take too long. In other words, a screwed connection or threaded connection would take more time to attach and detach then the production of whole pipe with the method of the present invention. Thus, *Hume* clearly does not disclose a

quick change device for exchanging tools. When looking at *Hume*, one further has to bear in mind that there is no need to provide a quick change device for the *Hume* method as it is not necessary to change the distributing core.

CONCLUSION

It is respectfully submitted that Claim 15 is patentable over the above cited references taken either singly or in combination. Accordingly, Applicant respectfully requests that the Board overturn the Examiner's rejection and instruct the Examiner to allow claim 15.

Respectfully submitted,
Gunther SCHILLER

Elizabeth C. Richter, Reg. No. 35,103
Attorney for Applicants

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Enclosures: Claims Appendix, Evidence Appendix, Related Proceedings Appendix, Check in the amount of $255.00

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Amy Klein

APPENDIX A

CLAIMS APPENDIX

Claim 15

Claim 15. Method for the production of a multi-layer concrete pipe, comprising the following steps:

pivoting a mold mantle, which stands essentially vertically on a turntable, into a first stand;

filling the mold mantle with a first concrete mixture by means of a first charging system;

distributing and compacting the concrete mixture in the mold mantle by means of a rotating and vertically displaceable first compacting tool;

pivoting the mold mantle, which stands essentially vertically on the turntable, out of the first stand and removing a concrete pipe formed from the concrete mixture from the mold;

wherein before the concrete pipe is removed from the mold, a second concrete mixture, which is an acid-resistant concrete mixture, is filled into the mold mantle, which essentially stands vertically, by means of a second charging system and wherein said second concrete mixture is distributed and compacted using a second compacting tool which is different from said first compacting tool and which has a diameter that is smaller a diameter of the first compacting tool, and wherein before said second concrete mixture is filled into the mold mantle and distributed and compacted in said mold mantle, said first

compacting tool is exchanged for said second compacting tool, by way of a quick-change device in said first stand, and wherein after the second concrete mixture has been filled into the mold mantle and distributed and compacted, said second compacting tool is exchanged for said first compacting tool by way of a quick-change device from said first stand.

APPENDIX B

Appendix B: Evidence Presented

Applicant is not submitting any additional evidence with this Appeal Brief.

APPENDIX C

RELATED APPEALS AND PROCEEDINGS:

None.

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which stands essentially vertically on the turntable, out of the first stand and removing a concrete pipe formed from the concrete mixture from the mold (p. 4 ln. 1-5, 11-14, p. 9 ln. 15-17). Before the concrete pipe is removed from the mold, a second concrete mixture, which is an acid-resistant concrete mixture, is filled into the mold mantle, which essentially stands vertically, by means of a second charging system (p. 9 ln. 21 - p. 10 ln. 1). Also, the second concrete mixture is distributed and compacted using a second compacting tool which is different from the first compacting tool and which has a diameter that is smaller a diameter of the first compacting tool (p. 10 ln. 1-4, Fig. 11). Before the second concrete mixture is filled into the mold mantle and distributed and compacted in the mold mantle, the first compacting tool is exchanged for the second compacting tool, by way of a quick-change device in the first stand (p. 10 ln. 16-19). After the second concrete mixture has been filled into the mold mantle and distributed and compacted, the second compacting tool is exchanged for the first compacting tool by way of a quick-change device from the first stand (p. 10 ln. 19 - p. 11 ln. 1).

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distributing and compacting the concrete mixture in the mold mantle by means of a rotating and vertically displaceable first compacting tool;

pivoting the mold mantle, which stands essentially vertically on the turntable, out of the first stand and removing a concrete pipe formed from the concrete mixture from the mold;

wherein before the concrete pipe is removed from the mold, a second concrete mixture, which is an acid-resistant concrete mixture, is filled into the mold mantle, which essentially stands vertically, by means of a second charging system and wherein said second concrete mixture is distributed and compacted using a second compacting tool which is different from said first compacting tool and which has a diameter that is smaller a diameter of the first compacting tool, and wherein before said second concrete mixture is filled into the mold mantle and distributed and compacted in said mold mantle, said first

compacting tool is exchanged for said second compacting tool, by way of a quick-change device in said first stand, and wherein after the second concrete mixture has been filled into the mold mantle and distributed and compacted, said second compacting tool is exchanged for said first compacting tool by way of a quick-change device from said first stand.

APPENDIX B

Appendix B: Evidence Presented

Applicant is not submitting any additional evidence with this Appeal Brief.

APPENDIX C

RELATED APPEALS AND PROCEEDINGS:

None.